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Bulletin 88/3171 Applicant: DOW CORNING CORPORATION, P.O.
Box 1767, Midland Michigan 48640 (US)72 Inventor: Palmer, Eric Melburn, American Aspheric Co.
P.O. Box 22303, Tucson Arizona (US)
Inventor: Sukhman, Yefim Petrovich, General Laser
Inc. 7862 East Gray Road, Scottsdale Arizona (US)
Inventor: Buchroeder, Richard Alfred, Optical Design
Service 2939 E. 3rd Street, Tucson Arizona (US)

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74 Representative: Spott, Gottfried, Dr. et al, Patentanwälte
Spott und Puschmann Sendlinger-Tor-Platz 11,
D-8000 München 2 (DE)

54 Ring of light laser optics system.

57 This invention provides a simplified laser optics system for generating a ring-shaped beam of laser radiation which is used for contouring and severing a curved, particularly a dome-shaped, article such as a silicone elastomer contact lens (122) from a workpiece (118). The laser optics system consists essentially of a focusing element (100) having a convex surface (104) which receives a circular beam (114) of laser radiation and an opposed conical surface (106) forming an axicon which element transforms the circular beam into a ring-shaped beam of laser radiation. The ring-shaped beam is received by a reflective element having a conical reflective surface (110) which causes the beam to impinge upon the curved workpiece surface, preferably at an angle which is substantially perpendicular to the workpiece surface, to accomplish edge contouring and severing of the article from the workpiece.

